WEST Search History

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DATE: Monday, February 06, 2006

Hide?	Set Name	Query	Hit Count
	DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=OR		
☐	L23	L21 and (dr1p$4 or dr5p$4)	1
☐	L22	L21 and phosphorylas$4	7
☐	L21	L1 and (Tischer or Ihlenfeldt or Barzu or Sakamoto or Pistotnik or Marliere or Pochet).in.	42
☐	L20	L19 and (dr1p$4 or dr5p$4)	4
☐	L19	L18 and vitro$4	1108
☐	L18	L17 and (synthes$4 or produc$4)	1262
☐	L17	L16 and phosphat$4	1265
☐	L16	L15 and (mutas$4 or aldolas$4 or transferas$4)	1285
☐	L15	L14 and (purine$4 or pyrimidine$4)	2321
☐	L14	L13 and phosphorylas$4	2983
☐	L13	deoxyribonucleosid$4 or nucleosid$4	35628
☐	L12	L11 and (dr1p$ or r1p$4)	5
☐	L11	L10 and (aldolas$4 or mutas$4 or transferas$4)	1325
☐	L10	L9 and phosphorylas$4	2389
☐	L9	l1 and (purin$4 or pyrimidin$4)	17007
☐	L8	L7 and transferas?	76
☐	L7	L6 and (mutase$4 or aldolas$4)	87
☐	L6	L5 same (produc$4 or synthe$4)	679
☐	L5	L4 same (purin$4 or pyrimidin$4)	1701
☐	L4	L1 same phosphorylas$4	2106
☐	L3	L2 and purine$4	2185
☐	L2	L1 and phosphorylas$4	3065
☐	L1	deoxynucleosid$4 or nucleosid$4	36122

END OF SEARCH HISTORY

=> d his full

(FILE 'HOME' ENTERED AT 12:40:16 ON 06 FEB 2006)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 12:40:29 ON 06 FEB 2006

SEA NUCLEOSIDE? OR DEOXINUCLEOSID?

31680 FILE ADISCTI
402 FILE ADISINSIGHT
587 FILE ADISNEWS
888 FILE AGRICOLA
987 FILE ANABSTR
7 FILE ANTE
18 FILE AQUALINE
273 FILE AQUASCI
1434 FILE BIOENG
34089 FILE BIOSIS
2646 FILE BIOTECHABS
2646 FILE BIOTECHDS
8222 FILE BIOTECHNO
2517 FILE CABA
56448 FILE CAPLUS
357 FILE CEABA-VTB
477 FILE CIN
973 FILE CONFSCI
40 FILE CROPB
113 FILE CROPU
14692 FILE DDFB
9472 FILE DDFU
42966 FILE DGENE
2095 FILE DISSABS
14692 FILE DRUGB
10919 FILE DRUGU
236 FILE EMBAL
27403 FILE EMBASE
8796 FILE ESBIOBASE
566 FILE FEDRIP
172 FILE FROSTI
401 FILE FSTA
28121 FILE GENBANK
53 FILE HEALSAFE
4539 FILE IFIPAT
763 FILE IMSDRUGNEWS
8 FILE IMSPRODUCT
345 FILE IMSRESEARCH
12585 FILE JICST-EPLUS
6 FILE KOSMET
9317 FILE LIFESCI
36165 FILE MEDLINE
259 FILE NIOSHTIC
432 FILE NTIS
2 FILE NUTRACEUT
56 FILE OCEAN
27779 FILE PASCAL
11 FILE PCTGEN
248 FILE PHAR
347 FILE PHARMAML
5 FILE PHIC
820 FILE PHIN
3697 FILE PROMT
1424 FILE PROUSDDR
1 FILE PS
1 FILE RDISCLOSURE
32836 FILE SCISEARCH
235 FILE SYNTHLINE

```
       24665  FILE TOXCENTER
       24317  FILE USPATFULL
        2059  FILE USPAT2
         147  FILE VETB
          54  FILE VETU
          29  FILE WATER
        5492  FILE WPIDS
          30  FILE WPIFV
        5492  FILE WPINDEX
         712  FILE IPA
         151  FILE NAPRALERT
        2186  FILE NLDB
L1          QUE NUCLEOSIDE? OR DEOXINUCLEOSID?
            --------
            D RANK

   FILE 'CAPLUS, MEDLINE, BIOSIS, SCISEARCH, ADISCTI, GENBANK, PASCAL,
   EMBASE, TOXCENTER, USPATFULL' ENTERED AT 12:43:10 ON 06 FEB 2006
L2     323503 SEA NUCLEOSIDE? OR DEOXINUCLEOSID?
L3      15679 SEA L2 (S) PHOSPHORYLAS?
L4       1775 SEA L3 (S)(SYNTHE?)
L5       2714 SEA L3(S)(PRODUC? OR SYNTHE?)
L6          3 SEA L5 AND PHOSPHOPENTOSE?
L7        430 SEA L5 AND ALDOLAS?
L8        314 SEA L7 AND MUTASE?
L9       2311 SEA L5 AND (PURIN? OR PYRIMIDIN?)
L10       449 SEA L9 AND (MUTAS? OR ALDOLAS? OR PHOSPHOPENTOS?)
L11       391 SEA L10 AND TRANSFERAS?
L12       391 DUP REM L11 (0 DUPLICATES REMOVED)
            D TI L12 1-100
            D TI L12 101-200
            D TI L12 201-300
            D TI L12 301-391
            D TI L6 1-3
L13    338433 SEA DEOXYRIBONUCLEOSI? OR NUCLEOSID?
L14     15679 SEA L3 AND PHOSPHORYLAS?
L15     18246 SEA L13 AND PHOSPHORYLAS?
L16      3148 SEA L15 AND (MUTAS? OR TRANSFERAS? OR ALDOLAS?)
L17      2309 SEA L16 AND PHOSPHAT?
L18      1243 SEA L17 AND THYMIDIN?
L19      1059 SEA L18 AND (PURIN? OR PYRIMIDINE?)
L20      1014 SEA L19 AND (SYNTHES? OR PRODUCT?)
L21        67 SEA L20 AND DR1P? OR DR5P?
L22         4 SEA L20 AND (DR1P? OR DR5P?)
            D TI L22 1-4

> file medline biosis caplus
COST IN U.S. DOLLARS                    SINCE FILE     TOTAL
                                ENTRY   SESSION
FULL ESTIMATED COST                        0.21      0.21

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=> s inorganic(s)phosphat?(s)remov?
L1        192 INORGANIC(S) PHOSPHAT?(S) REMOV?

=> s l1(s)pyrophosphat?
L2          8 L1(S) PYROPHOSPHAT?
=> s inorganic(s)phosphat?(s)precipit?
L3        160 INORGANIC(S) PHOSPHAT?(S) PRECIPIT?
```

=> s l3(s)pyrophosphat?
L4 1 L3(S) PYROPHOSPHAT?

=> d ti l4

L4 ANSWER 1 OF 1 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI EFFECTS OF THE ADDITION OF CALCIUM ON THE COLLOIDAL STABILITY OF SOYMILK.

=> s inorganic(s)phosphat?(s)phosphofructosekinas?
L5 0 INORGANIC(S) PHOSPHAT?(S) PHOSPHOFRUCTOSEKINAS?

=> s inorganic(s)phosphat?(s)phosphofructokinas?
L6 57 INORGANIC(S) PHOSPHAT?(S) PHOSPHOFRUCTOKINAS?

=> d ti l6 1-57

=> index bioscience medicine
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 0.21 0.21

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,
CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 10:33:28 ON 08 FEB 2006

73 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s inorgan?(s)phosphat?(s)pyrophosphat?
74 FILE AGRICOLA
17 FILE ANABSTR
1 FILE ANTE
6 FILE AQUALINE
18 FILE AQUASCI
27 FILE BIOENG
296 FILE BIOSIS
68 FILE BIOTECHABS
68 FILE BIOTECHDS
155 FILE BIOTECHNO
193 FILE CABA
179 FILE CAPLUS
5 FILE CEABA-VTB
4 FILE CONFSCI
18 FILES SEARCHED...
4 FILE CROPU
25 FILE DDFB
6 FILE DDFU
133 FILE DGENE
38 FILE DISSABS
25 FILE DRUGB
13 FILE DRUGU
3 FILE EMBAL
194 FILE EMBASE
172 FILE ESBIOBASE
12* FILE FEDRIP
2 FILE FOMAD
33 FILES SEARCHED...
4 FILE FROSTI
41 FILE FSTA
337 FILE GENBANK
1 FILE HEALSAFE
194 FILE IFIPAT

```
      20  FILE JICST-EPLUS
       1  FILE KOSMET
     176  FILE LIFESCI
     311  FILE MEDLINE
       9  FILE NIOSHTIC
       8  FILE NTIS
       4  FILE OCEAN
     135  FILE PASCAL
      14  FILE PROMT
      13  FILE RDISCLOSURE
  59 FILES SEARCHED...
     214  FILE SCISEARCH
      37  FILE TOXCENTER
    4584  FILE USPATFULL
     407  FILE USPAT2
       9  FILE WATER
     474  FILE WPIDS
       1  FILE WPIFV
     474  FILE WPINDEX
       2  FILE IPA
       1  FILE NAPRALERT
       6  FILE NLDB

  52 FILES HAVE ONE OR MORE ANSWERS,  73 FILES SEARCHED IN STNINDEX

L1   QUE INORGAN?(S) PHOSPHAT?(S) PYROPHOSPHAT?

=> d rank
F1      4584  USPATFULL
F2       474  WPIDS
F3       474  WPINDEX
F4       407  USPAT2
F5       337  GENBANK
F6       311  MEDLINE
F7       296  BIOSIS
F8       214  SCISEARCH
F9       194  EMBASE
F10      194  IFIPAT
F11      193  CABA
F12      179  CAPLUS
F13      176  LIFESCI
F14      172  ESBIOBASE
F15      155  BIOTECHNO
F16      135  PASCAL
F17      133  DGENE
F18       74  AGRICOLA
F19       68  BIOTECHABS
F20       68  BIOTECHDS
F21       41  FSTA
F22       38  DISSABS
F23       37  TOXCENTER
F24       27  BIOENG
F25       25  DDFB
F26       25  DRUGB
F27       20  JICST-EPLUS
F28       18  AQUASCI
F29       17  ANABSTR
F30       14  PROMT
F31       13  DRUGU
F32       13  RDISCLOSURE
F33       12* FEDRIP
F34        9  NIOSHTIC
F35        9  WATER
F36        8  NTIS
F37        6  AQUALINE
F38        6  DDFU
F39        6  NLDB
F40        5  CEABA-VTB
```

F41 4 CONFSCI
F42 4 CROPU
F43 4 FROSTI
F44 4 OCEAN
F45 3 EMBAL
F46 2 FOMAD
F47 2 IPA
F48 1 ANTE
F49 1 HEALSAFE
F50 1 KOSMET
F51 1 WPIFV
F52 1 NAPRALERT

=> file f1-f4,f6-f11
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 2.44 2.65

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COPYRIGHT (C) 2006 IFI CLAIMS(R) Patent Services (IFI)

FILE 'CABA' ENTERED AT 10:35:48 ON 08 FEB 2006
COPYRIGHT (C) 2006 CAB INTERNATIONAL (CABI)

=> s inorgan?(s)phosphat?(s)pyrophosphat?
L2 6867 INORGAN?(S) PHOSPHAT?(S) PYROPHOSPHAT?

=> s l2 (s)(conver? or remov? or complex? or precipit?)
2 FILES SEARCHED...
L3 819 L2 (S)(CONVER? OR REMOV? OR COMPLEX? OR PRECIPIT?)

=> s l3(s)enzym?
L4 183 L3(S) ENZYM?

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5 164 DUP REM L4 (19 DUPLICATES REMOVED)

=> s l3(s)phosphofructokinas?
L6 24 L3(S) PHOSPHOFRUCTOKINAS?

=> dup rem l6
PROCESSING COMPLETED FOR L6
L7 23 DUP REM L6 (1 DUPLICATE REMOVED)

```
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 NEWS  3  DEC 05   CASREACT(R) - Over 10 million reactions available
 NEWS  4  DEC 14   2006 MeSH terms loaded in MEDLINE/LMEDLINE
 NEWS  5  DEC 14   2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
 NEWS  6  DEC 14   CA/CAplus to be enhanced with updated IPC codes
 NEWS  7  DEC 21   IPC search and display fields enhanced in CA/CAplus with the
                   IPC reform
 NEWS  8  DEC 23   New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
                   USPAT2
 NEWS  9  JAN 13   IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
 NEWS 10  JAN 13   New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
                   INPADOC
 NEWS 11  JAN 17   Pre-1988 INPI data added to MARPAT
 NEWS 12  JAN 17   IPC 8 in the WPI family of databases including WPIFV
 NEWS 13  JAN 30   Saved answer limit increased
 NEWS 14  JAN 31   Monthly current-awareness alert (SDI) frequency
                   added to TULSA

 NEWS EXPRESS  JANUARY 03 CURRENT VERSION FOR WINDOWS IS V8.01,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
               V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT
               http://download.cas.org/express/v8.0-Discover/

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FILE 'HOME' ENTERED AT 12:40:16 ON 06 FEB 2006

=> index bioscience medicine
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21
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INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,
       AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,
       CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
       DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 12:40:29 ON 06 FEB 2006

73 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s nucleoside? or deoxinucleosid?
      31680   FILE ADISCTI
        402   FILE ADISINSIGHT
        587   FILE ADISNEWS
        888   FILE AGRICOLA
        987   FILE ANABSTR
          7   FILE ANTE
         18   FILE AQUALINE
        273   FILE AQUASCI
       1434   FILE BIOENG
      34089   FILE BIOSIS
       2646   FILE BIOTECHABS
       2646   FILE BIOTECHDS
       8222   FILE BIOTECHNO
       2517   FILE CABA
      56448   FILE CAPLUS
        357   FILE CEABA-VTB
        477   FILE CIN
        973   FILE CONFSCI
         40   FILE CROPB
        113   FILE CROPU
      14692   FILE DDFB
       9472   FILE DDFU
      42966   FILE DGENE
       2095   FILE DISSABS
      14692   FILE DRUGB
      10919   FILE DRUGU
        236   FILE EMBAL
      27403   FILE EMBASE
       8796   FILE ESBIOBASE
        566   FILE FEDRIP
        172   FILE FROSTI
        401   FILE FSTA
      28121   FILE GENBANK
         53   FILE HEALSAFE
       4539   FILE IFIPAT
        763   FILE IMSDRUGNEWS
          8   FILE IMSPRODUCT
        345   FILE IMSRESEARCH
  41 FILES SEARCHED...
      12585   FILE JICST-EPLUS
          6   FILE KOSMET
       9317   FILE LIFESCI
      36165   FILE MEDLINE
        259   FILE NIOSHTIC
        432   FILE NTIS
          2   FILE NUTRACEUT
         56   FILE OCEAN
      27779   FILE PASCAL
         11   FILE PCTGEN
        248   FILE PHAR
        347   FILE PHARMAML
          5   FILE PHIC
        820   FILE PHIN
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  3697   FILE PROMT
  1424   FILE PROUSDDR
     1   FILE PS
     1   FILE RDISCLOSURE
 32836   FILE SCISEARCH
   235   FILE SYNTHLINE
 24665   FILE TOXCENTER
 24317   FILE USPATFULL
  2059   FILE USPAT2
   147   FILE VETB
    54   FILE VETU
    29   FILE WATER
  5492   FILE WPIDS
    30   FILE WPIFV
  5492   FILE WPINDEX
   712   FILE IPA
   151   FILE NAPRALERT
  2186   FILE NLDB

  70 FILES HAVE ONE OR MORE ANSWERS,   73 FILES SEARCHED IN STNINDEX

L1   QUE NUCLEOSIDE? OR DEOXINUCLEOSID?

=> d rank
F1       56448   CAPLUS
F2       42966   DGENE
F3       36165   MEDLINE
F4       34089   BIOSIS
F5       32836   SCISEARCH
F6       31680   ADISCTI
F7       28121   GENBANK
F8       27779   PASCAL
F9       27403   EMBASE
F10      24665   TOXCENTER
F11      24317   USPATFULL
F12      14692   DDFB
F13      14692   DRUGB
F14      12585   JICST-EPLUS
F15      10919   DRUGU
F16       9472   DDFU
F17       9317   LIFESCI
F18       8796   ESBIOBASE
F19       8222   BIOTECHNO
F20       5492   WPIDS
F21       5492   WPINDEX
F22       4539   IFIPAT
F23       3697   PROMT
F24       2646   BIOTECHABS
F25       2646   BIOTECHDS
F26       2517   CABA
F27       2186   NLDB
F28       2095   DISSABS
F29       2059   USPAT2
F30       1434   BIOENG
F31       1424   PROUSDDR
F32        987   ANABSTR
F33        973   CONFSCI
F34        888   AGRICOLA
F35        820   PHIN
F36        763   IMSDRUGNEWS
F37        712   IPA
F38        587   ADISNEWS
F39        566   FEDRIP
F40        477   CIN
F41        432   NTIS
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```
F42          402   ADISINSIGHT
F43          401   FSTA
F44          357   CEABA-VTB
F45          347   PHARMAML
F46          345   IMSRESEARCH
F47          273   AQUASCI
F48          259   NIOSHTIC
F49          248   PHAR
F50          236   EMBAL
F51          235   SYNTHLINE
F52          172   FROSTI
F53          151   NAPRALERT
F54          147   VETB
F55          113   CROPU
F56           56   OCEAN
F57           54   VETU
F58           53   HEALSAFE
F59           40   CROPB
F60           30   WPIFV
F61           29   WATER
F62           18   AQUALINE
F63           11   PCTGEN
F64            8   IMSPRODUCT
F65            7   ANTE
F66            6   KOSMET
F67            5   PHIC
F68            2   NUTRACEUT
F69            1   PS
F70            1   RDISCLOSURE


=> file f1, f3-f11
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       3.05       3.26

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FILE 'USPATFULL' ENTERED AT 12:43:10 ON 06 FEB 2006
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=> s nucleoside? or deoxinucleosid?
L2      323503 NUCLEOSIDE? OR DEOXINUCLEOSID?

=> s l2 (s)phosphorylas?
L3       15679 L2 (S) PHOSPHORYLAS?

=> s l3 (s)(synthe?)
L4        1775 L3 (S)(SYNTHE?)

=> s l3(s)(produc? or synthe?)
   7 FILES SEARCHED...
L5        2714 L3(S)(PRODUC? OR SYNTHE?)

=> s l5 and phosphopentose?
L6           3 L5 AND PHOSPHOPENTOSE?

=> s l5 and aldolas?
L7         430 L5 AND ALDOLAS?

=> s l7 and mutase?
L8         314 L7 AND MUTASE?

=> s l5 and (purin? or pyrimidin?)
L9        2311 L5 AND (PURIN? OR PYRIMIDIN?)

=> s l9 and (mutas? or aldolas? or phosphopentos?)
L10        449 L9 AND (MUTAS? OR ALDOLAS? OR PHOSPHOPENTOS?)

=> s l10 and transferas?
L11        391 L10 AND TRANSFERAS?

=> dup rem l11
DUPLICATE IS NOT AVAILABLE IN 'GENBANK'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L11
L12         391 DUP REM L11 (0 DUPLICATES REMOVED)

=> d ti l12 1-100

L12  ANSWER 1 OF 391  USPATFULL on STN
TI     Use of interfering RNA in the production of transgenic animals

L12  ANSWER 2 OF 391  USPATFULL on STN
TI     Methods for identifying small molecules that modulate premature
       translation termination and nonsense mrna decay

L12  ANSWER 3 OF 391  USPATFULL on STN
TI     Methods and products based on oligomerization of stress proteins

L12  ANSWER 4 OF 391  USPATFULL on STN
TI     Signatures of ER status in breast cancer

L12  ANSWER 5 OF 391  USPATFULL on STN
TI     Polynucleotides and polypeptides, materials incorporating them and
       methods for using them

L12  ANSWER 6 OF 391  USPATFULL on STN
TI     Methods and apparatus for gel-free qualitative and quantitative proteome
       analysis, and uses therefore

L12  ANSWER 7 OF 391  USPATFULL on STN
```

L22 ANSWER 4 OF 4 USPATFULL on STN
TI Methods for identifying drug targets based on genomic sequence data

=> d his full

(FILE 'HOME' ENTERED AT 12:40:16 ON 06 FEB 2006)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 12:40:29 ON 06 FEB 2006
SEA NUCLEOSIDE? OR DEOXINUCLEOSID?

31680	FILE ADISCTI
402	FILE ADISINSIGHT
587	FILE ADISNEWS
888	FILE AGRICOLA
987	FILE ANABSTR
7	FILE ANTE
18	FILE AQUALINE
273	FILE AQUASCI
1434	FILE BIOENG
34089	FILE BIOSIS
2646	FILE BIOTECHABS
2646	FILE BIOTECHDS
8222	FILE BIOTECHNO
2517	FILE CABA
56448	FILE CAPLUS
357	FILE CEABA-VTB
477	FILE CIN
973	FILE CONFSCI
40	FILE CROPB
113	FILE CROPU
14692	FILE DDFB
9472	FILE DDFU
42966	FILE DGENE
2095	FILE DISSABS
14692	FILE DRUGB
10919	FILE DRUGU
236	FILE EMBAL
27403	FILE EMBASE
8796	FILE ESBIOBASE
566	FILE FEDRIP
172	FILE FROSTI
401	FILE FSTA
28121	FILE GENBANK
53	FILE HEALSAFE
4539	FILE IFIPAT
763	FILE IMSDRUGNEWS
8	FILE IMSPRODUCT
345	FILE IMSRESEARCH
12585	FILE JICST-EPLUS
6	FILE KOSMET
9317	FILE LIFESCI
36165	FILE MEDLINE
259	FILE NIOSHTIC
432	FILE NTIS
2	FILE NUTRACEUT
56	FILE OCEAN
27779	FILE PASCAL
11	FILE PCTGEN
248	FILE PHAR
347	FILE PHARMAML
5	FILE PHIC

```
              820   FILE PHIN
             3697   FILE PROMT
             1424   FILE PROUSDDR
                1   FILE PS
                1   FILE RDISCLOSURE
            32836   FILE SCISEARCH
              235   FILE SYNTHLINE
            24665   FILE TOXCENTER
            24317   FILE USPATFULL
             2059   FILE USPAT2
              147   FILE VETB
               54   FILE VETU
               29   FILE WATER
             5492   FILE WPIDS
               30   FILE WPIFV
             5492   FILE WPINDEX
              712   FILE IPA
              151   FILE NAPRALERT
             2186   FILE NLDB
L1               QUE NUCLEOSIDE? OR DEOXINUCLEOSID?
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     FILE 'CAPLUS, MEDLINE, BIOSIS, SCISEARCH, ADISCTI, GENBANK, PASCAL,
     EMBASE, TOXCENTER, USPATFULL' ENTERED AT 12:43:10 ON 06 FEB 2006
L2          323503 SEA NUCLEOSIDE? OR DEOXINUCLEOSID?
L3           15679 SEA L2 (S) PHOSPHORYLAS?
L4            1775 SEA L3 (S)(SYNTHE?)
L5            2714 SEA L3(S)(PRODUC? OR SYNTHE?)
L6               3 SEA L5 AND PHOSPHOPENTOSE?
L7             430 SEA L5 AND ALDOLAS?
L8             314 SEA L7 AND MUTASE?
L9            2311 SEA L5 AND (PURIN? OR PYRIMIDIN?)
L10            449 SEA L9 AND (MUTAS? OR ALDOLAS? OR PHOSPHOPENTOS?)
L11            391 SEA L10 AND TRANSFERAS?
L12            391 DUP REM L11 (0 DUPLICATES REMOVED)
                   D TI L12 1-100
                   D TI L12 101-200
                   D TI L12 201-300
                   D TI L12 301-391
                   D TI L6 1-3
L13         338433 SEA DEOXYRIBONUCLEOSI? OR NUCLEOSID?
L14          15679 SEA L3 AND PHOSPHORYLAS?
L15          18246 SEA L13 AND PHOSPHORYLAS?
L16           3148 SEA L15 AND (MUTAS? OR TRANSFERAS? OR ALDOLAS?)
L17           2309 SEA L16 AND PHOSPHAT?
L18           1243 SEA L17 AND THYMIDIN?
L19           1059 SEA L18 AND (PURIN? OR PYRIMIDINE?)
L20           1014 SEA L19 AND (SYNTHES? OR PRODUCT?)
L21             67 SEA L20 AND DR1P? OR DR5P?
L22              4 SEA L20 AND (DR1P? OR DR5P?)
                   D TI L22 1-4


     FILE HOME

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     FILE CAPLUS

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for a description of changes.

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FILE COVERS 1971 TO PATENT PUBLICATION DATE: 2 Feb 2006 (20060202/PD)
FILE LAST UPDATED: 2 Feb 2006 (20060202/ED)
HIGHEST GRANTED PATENT NUMBER: US6993790
HIGHEST APPLICATION PUBLICATION NUMBER: US2006026727
CA INDEXING IS CURRENT THROUGH 2 Feb 2006 (20060202/UPCA)
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NEWS  7  DEC 21  IPC search and display fields enhanced in CA/CAplus with the
                 IPC reform
NEWS  8  DEC 23  New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
                 USPAT2
NEWS  9  JAN 13  IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 10  JAN 13  New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
                 INPADOC
NEWS 11  JAN 17  Pre-1988 INPI data added to MARPAT
NEWS 12  JAN 17  IPC 8 in the WPI family of databases including WPIFV
NEWS 13  JAN 30  Saved answer limit increased
NEWS 14  JAN 31  Monthly current-awareness alert (SDI) frequency
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=> s inorganic(s)phosphat?(s)remov?
L1          192 INORGANIC(S) PHOSPHAT?(S) REMOV?

=> s l1(s)pyrophosphat?
L2            8 L1(S) PYROPHOSPHAT?
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=> d ti l2 1-8

L2   ANSWER 1 OF 8     MEDLINE on STN
TI   Fluoride alters casein kinase II and alkaline phosphatase activity in
     vitro with potential implications for dentine mineralization.

L2   ANSWER 2 OF 8     MEDLINE on STN
TI   Tissue differentiation and correlated changes in enzymatic activities
     during primary antler development in fallow deer (Dama dama).

L2   ANSWER 3 OF 8     MEDLINE on STN
TI   Tightly bound pyrophosphate in Escherichia coli inorganic pyrophosphatase.

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TI   Method of preparing polypeptides in a cell-free translation system.

L2   ANSWER 5 OF 8  BIOSIS  COPYRIGHT (c) 2006 The Thomson Corporation  on STN
TI   Fluoride alters casein kinase II and alkaline phosphatase activity in
     vitro with potential implications for dentine mineralization.

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TI   Tissue differentiation and correlated changes in enzymatic activities
     during primary antler development in fallow deer (Dama dama).

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TI   BEHAVIOR OF CHROMIUM IN SOILS PART 1 TRIVALENT FORMS.

L2   ANSWER 8 OF 8  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Methods for the Quantitative Estimation of Inorganic Phosphorus in
     Vegetable and Animal Substances


=> s inorganic(s)phosphat?(s)precipit?
L3         160 INORGANIC(S) PHOSPHAT?(S) PRECIPIT?

=> s l3(s)pyrophosphat?
L4           1 L3(S) PYROPHOSPHAT?

=> d ti l4

L4   ANSWER 1 OF 1  BIOSIS  COPYRIGHT (c) 2006 The Thomson Corporation  on STN
TI   EFFECTS OF THE ADDITION OF CALCIUM ON THE COLLOIDAL STABILITY OF SOYMILK.


=> s inorganic(s)phosphat?(s)phosphofructosekinas?
L5           0 INORGANIC(S) PHOSPHAT?(S) PHOSPHOFRUCTOSEKINAS?

=> s inorganic(s)phosphat?(s)phosphofructokinas?
L6          57 INORGANIC(S) PHOSPHAT?(S) PHOSPHOFRUCTOKINAS?

=> d ti l6 1-57

L6   ANSWER 1 OF 57     MEDLINE on STN
TI   Glycolysis in Entamoeba histolytica. Biochemical characterization of
     recombinant glycolytic enzymes and flux control analysis.

L6   ANSWER 2 OF 57     MEDLINE on STN
TI   Mechanisms for increased glycolysis in the hypertrophied rat heart.

L6   ANSWER 3 OF 57     MEDLINE on STN
TI   Proton transport in maize tonoplasts supported by fructose-1,6-
     bisphosphate cleavage. Pyrophosphate-dependent phosphofructokinase as a
     pyrophosphate-regenerating system.

L6   ANSWER 4 OF 57     MEDLINE on STN
```

TI Skeletal muscle phosphocreatine depletion depresses myocellular energy status during sepsis.

L6 ANSWER 5 OF 57 MEDLINE on STN
TI Purification and characterization of pyrophosphate-dependent phosphofructokinase from phosphate-starved Brassica nigra suspension cells.

L6 ANSWER 6 OF 57 MEDLINE on STN
TI Control of adenine nucleotide metabolism and glycolysis in vertebrate skeletal muscle during exercise.

L6 ANSWER 7 OF 57 MEDLINE on STN
TI pH in human tumor xenografts and transplanted rat tumors: effect of insulin, inorganic phosphate, and m-iodobenzylguanidine.

L6 ANSWER 8 OF 57 MEDLINE on STN
TI Relationships between the neuronal sodium/potassium pump and energy metabolism. Effects of K+, Na+, and adenosine triphosphate in isolated brain synaptosomes.

L6 ANSWER 9 OF 57 MEDLINE on STN
TI **Inorganic** pyrophosphate: fructose-6-**phosphate** 1-phosphotransferase of the potato tuber is related to the major ATP-dependent **phosphofructokinase** of E. coli.

L6 ANSWER 10 OF 57 MEDLINE on STN
TI Isotope exchange as a probe of the kinetic mechanism of pyrophosphate-dependent phosphofructokinase.

L6 ANSWER 11 OF 57 MEDLINE on STN
TI Phosphorus NMR spectroscopy study of muscular enzyme deficiencies involving glycogenolysis and glycolysis.

L6 ANSWER 12 OF 57 MEDLINE on STN
TI Phosphofructokinase from the epithelial cells of rat small intestine. Comparison of regulatory properties with those of skeletal muscle, liver and brain phosphofructokinase.

L6 ANSWER 13 OF 57 MEDLINE on STN
TI **Inorganic phosphate** amplifies the effects of AMP and fructose-2,6-bisphosphate on yeast **phosphofructokinase.**

L6 ANSWER 14 OF 57 MEDLINE on STN
TI Phosphate dependency of phosphofructokinase 2.

L6 ANSWER 15 OF 57 MEDLINE on STN
TI Influence of **inorganic phosphate** on the kinetic properties of yeast **phosphofructokinase.**

L6 ANSWER 16 OF 57 MEDLINE on STN
TI Mechanism of red cell 2,3-diphosphoglycerate increase in neonatal lambs.

L6 ANSWER 17 OF 57 MEDLINE on STN
TI Effects of whole body UV-irradiation on oxygen delivery from the erythrocyte.

L6 ANSWER 18 OF 57 MEDLINE on STN
TI Properties of phospho and dephospho forms of muscle phosphofructokinase.

L6 ANSWER 19 OF 57 MEDLINE on STN
TI REgulation of glycolysis/fructolysis in buffalo spermatozoa.

L6 ANSWER 20 OF 57 MEDLINE on STN
TI pH-dependent temperature sensitivity of rat lens phosphofructokinase.

L6 ANSWER 21 OF 57 MEDLINE on STN
TI The effects of ammonium, **inorganic phosphate** and potassium ions on the activity of **phosphofructokinases** from muscle and nervous tissues of vertebrates and invertebrates.

L6 ANSWER 22 OF 57 MEDLINE on STN
TI Myocardial adenine nucleotides, hexose **phosphates** and **inorganic phosphate**, and the regulation of **phosphofructokinase** activity during fluoroacetate poisoning in the rat.

L6 ANSWER 23 OF 57 MEDLINE on STN
TI Kinetic properties of the **phosphofructokinase** from erythrocytes of rats and rabbits. I. The influence of potassium and ammonium ions and of **inorganic phosphate.**

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TI Glycolysis in Entamoeba histolytica - Biochemical characterization of recombinant glycolytic enzymes and flux control analysis.

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TI Proton transport in maize tonoplasts supported by fructose-1,6-bisphosphate cleavage. Pyrophosphate-dependent phosphofructokinase as a pyrophosphate-regenerating system.

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TI Disruption of the phosphate-starvation response of Brassica napus by the fungicide phosphonate.

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TI Purification and characterization of pyrophosphate-dependent phosphofructokinase from phosphate-starved Brassica nigra suspension cells.

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TI Control of adenine nucleotide metabolism and glycolysis in vertebrate skeletal muscle during exercise.

L6 ANSWER 30 OF 57 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI The fungicide phosphonate disrupts the phosphate-starvation response in Brassica nigra seedlings.

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TI RELATIONSHIPS BETWEEN THE NEURONAL SODIUM POTASSIUM PUMP AND ENERGY METABOLISM EFFECTS OF POTASSIUM ION SODIUM ION AND ATP IN ISOLATED BRAIN SYNAPTOSOMES.

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TI **INORGANIC** PYROPHOSPHATE FRUCTOSE-6-**PHOSPHATE** 1-PHOSPHOTRANSFERASE OF THE POTATO TUBER IS RELATED TO THE MAJOR ATP-DEPENDENT **PHOSPHOFRUCTOKINASE** OF ESCHERICHIA-COLI.

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TI ISOTOPE EXCHANGE AS A PROBE OF THE KINETIC MECHANISM OF PYROPHOSPHATE-DEPENDENT PHOSPHOFRUCTOKINASE.

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TI BIOCHEMISTRY OF ENTAMOEBA A REVIEW.

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TI PHOSPHORUS NMR SPECTROSCOPY STUDY OF MUSCULAR ENZYME DEFICIENCIES INVOLVING GLYCOGENOLYSIS AND GLYCOLYSIS.

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TI THE ROLE OF INORGANIC PHOSPHATE IN THE REGULATION OF PFK ACTIVITY IN TOMATOES.

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TI PHOSPHOFRUCTOKINASE FROM THE EPITHELIAL CELLS OF RAT SMALL INTESTINE COMPARISON OF REGULATORY PROPERTIES WITH THOSE OF SKELETAL MUSCLE LIVER AND BRAIN PHOSPHOFRUCTOKINASE.

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TI IN-VIVO PHOSPHORUS-31 TOPOGRAPHIC MAGNETIC RESONANCE OF RIPENING AVOCADO FRUIT.

L6 ANSWER 41 OF 57 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI **INORGANIC PHOSPHATE** AMPLIFIES THE EFFECTS OF AMP AND FRUCTOSE 2 6-BISPHOSPHATE ON YEAST SACCHAROMYCES-CEREVISIAE **PHOSPHOFRUCTOKINASE.**

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TI PHOSPHATE DEPENDENCY OF PHOSPHOFRUCTOKINASE 2 EC-2.7.1.-.

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TI SEQUENTIAL CHANGES IN RED CELL GLYCOLYTIC ENZYMES AND INTERMEDIATES AND POSSIBLE CONTROL MECHANISMS IN THE FIRST 2 MONTHS OF POSTNATAL LIFE IN LAMBS.

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TI INFLUENCE OF **INORGANIC PHOSPHATE** ON THE KINETIC PROPERTIES OF YEAST SACCHAROMYCES-CEREVISIAE **PHOSPHOFRUCTOKINASE** EC-2.7.1.11.

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TI PLANT ENZYMES PHOSPHORYLATING FRUCTOSE-6-PHOSPHATE.

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TI ACTIVATION OF THE PLASTID ISOZYME OF PHOSPHO FRUCTO KINASE EC-2.7.1.11 FROM DEVELOPING ENDOSPERM OF RICINUS-COMMUNIS BY FRUCTOSE 2 6 BIS PHOSPHATE.

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TI CHLOROPLAST PHOSPHO FRUCTO KINASE EC-2.7.1.11 IN THE GREEN ALGA DUNALIELLA-MARINA PARTIAL PURIFICATION AND KINETIC AND REGULATORY PROPERTIES.

L6 ANSWER 48 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
TI In Silico Exploration of the Fructose-6-Phosphate Phosphorylation Step in Glycolysis: Genomic Evidence of the Coexistence of an Atypical ATP-Dependent Along with a PPi-Dependent Phosphofructokinase in Propionibacterium freudenreichii subsp. shermanii

L6 ANSWER 49 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
TI Effect of **inorganic phosphate** nutrition on the molecular and kinetic properties of pyrophosphate-dependent **phosphofructokinase** in Brassica nigra

L6 ANSWER 50 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
TI **Inorganic** pyrophosphate:fructose-6-**phosphate** 1-phosphotransferase of the potato tuber is related to the major ATP-dependent **phosphofructokinase** of E. coli

L6 ANSWER 51 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
TI **Inorganic phosphate** amplifies the effects of AMP and fructose-2,6-bisphosphate on yeast **phosphofructokinase**

L6 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
TI Influence of **inorganic phosphate** on the kinetic properties of yeast **phosphofructokinase**

L6 ANSWER 53 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
TI Properties of carboxytransphosphorylase; pyruvate, **phosphate** dikinase; pyrophosphate-**phosphofructokinase** and pyrophosphate-acetate kinase and their roles in the metabolism of **inorganic** pyrophosphate

L6 ANSWER 54 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
TI Effects of ammonium, **inorganic phosphate**, and potassium ions on the activity of **phosphofructokinases** from muscle and nervous tissues of vertebrates and invertebrates

L6 ANSWER 55 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
TI Myocardial adenine nucleotides, hexose **phosphates**, and **inorganic phosphate**, and the regulation of **phosphofructokinase** activity during fluoroacetate poisoning in the rat

L6 ANSWER 56 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
TI Kinetic properties of the **phosphofructokinase** from erythrocytes of rats and rabbits. 1. Influence of potassium and ammonium ions and of **inorganic phosphate**

L6 ANSWER 57 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
TI Regulation of glycolysis in muscle

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                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

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      CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
      DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 10:33:28 ON 08 FEB 2006

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         17   FILE ANABSTR
          1   FILE ANTE
          6   FILE AQUALINE
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         27   FILE BIOENG
        296   FILE BIOSIS
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        155   FILE BIOTECHNO
        193   FILE CABA
        179   FILE CAPLUS
          5   FILE CEABA-VTB
          4   FILE CONFSCI
  18 FILES SEARCHED...
          4   FILE CROPU
         25   FILE DDFB
          6   FILE DDFU
        133   FILE DGENE
         38   FILE DISSABS
         25   FILE DRUGB
         13   FILE DRUGU
          3   FILE EMBAL
        194   FILE EMBASE
        172   FILE ESBIOBASE
         12*  FILE FEDRIP
          2   FILE FOMAD
  33 FILES SEARCHED...
          4   FILE FROSTI
         41   FILE FSTA
        337   FILE GENBANK
          1   FILE HEALSAFE
        194   FILE IFIPAT
         20   FILE JICST-EPLUS
          1   FILE KOSMET
        176   FILE LIFESCI
        311   FILE MEDLINE
          9   FILE NIOSHTIC
          8   FILE NTIS
          4   FILE OCEAN
        135   FILE PASCAL
         14   FILE PROMT
         13   FILE RDISCLOSURE
  59 FILES SEARCHED...
        214   FILE SCISEARCH
         37   FILE TOXCENTER
       4584   FILE USPATFULL
        407   FILE USPAT2
          9   FILE WATER
        474   FILE WPIDS
          1   FILE WPIFV
        474   FILE WPINDEX
          2   FILE IPA
          1   FILE NAPRALERT
          6   FILE NLDB
```

52 FILES HAVE ONE OR MORE ANSWERS, 73 FILES SEARCHED IN STNINDEX

L1 QUE INORGAN?(S) PHOSPHAT?(S) PYROPHOSPHAT?

=> d rank

F1	4584	USPATFULL
F2	474	WPIDS
F3	474	WPINDEX
F4	407	USPAT2
F5	337	GENBANK
F6	311	MEDLINE
F7	296	BIOSIS
F8	214	SCISEARCH
F9	194	EMBASE
F10	194	IFIPAT
F11	193	CABA
F12	179	CAPLUS
F13	176	LIFESCI
F14	172	ESBIOBASE
F15	155	BIOTECHNO
F16	135	PASCAL
F17	133	DGENE
F18	74	AGRICOLA
F19	68	BIOTECHABS
F20	68	BIOTECHDS
F21	41	FSTA
F22	38	DISSABS
F23	37	TOXCENTER
F24	27	BIOENG
F25	25	DDFB
F26	25	DRUGB
F27	20	JICST-EPLUS
F28	18	AQUASCI
F29	17	ANABSTR
F30	14	PROMT
F31	13	DRUGU
F32	13	RDISCLOSURE
F33	12*	FEDRIP
F34	9	NIOSHTIC
F35	9	WATER
F36	8	NTIS
F37	6	AQUALINE
F38	6	DDFU
F39	6	NLDB
F40	5	CEABA-VTB
F41	4	CONFSCI
F42	4	CROPU
F43	4	FROSTI
F44	4	OCEAN
F45	3	EMBAL
F46	2	FOMAD
F47	2	IPA
F48	1	ANTE
F49	1	HEALSAFE
F50	1	KOSMET
F51	1	WPIFV
F52	1	NAPRALERT

=> file f1-f4,f6-f11

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.44	2.65

```
FILE 'USPATFULL' ENTERED AT 10:35:48 ON 08 FEB 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ENTERED AT 10:35:48 ON 08 FEB 2006
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FILE 'WPINDEX' ACCESS NOT AUTHORIZED

FILE 'USPAT2' ENTERED AT 10:35:48 ON 08 FEB 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 10:35:48 ON 08 FEB 2006

FILE 'BIOSIS' ENTERED AT 10:35:48 ON 08 FEB 2006
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FILE 'IFIPAT' ENTERED AT 10:35:48 ON 08 FEB 2006
COPYRIGHT (C) 2006 IFI CLAIMS(R) Patent Services (IFI)

FILE 'CABA' ENTERED AT 10:35:48 ON 08 FEB 2006
COPYRIGHT (C) 2006 CAB INTERNATIONAL (CABI)

=> s inorgan?(s)phosphat?(s)pyrophosphat?
L2        6867 INORGAN?(S) PHOSPHAT?(S) PYROPHOSPHAT?

=> s l2 (s)(conver? or remov? or complex? or precipit?)
   2 FILES SEARCHED...
L3         819 L2 (S)(CONVER? OR REMOV? OR COMPLEX? OR PRECIPIT?)

=> s l3(s)enzym?
L4         183 L3(S) ENZYM?

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5          164 DUP REM L4 (19 DUPLICATES REMOVED)

=> s l3(s)phosphofructokinas?
L6          24 L3(S) PHOSPHOFRUCTOKINAS?

=> dup rem l6
PROCESSING COMPLETED FOR L6
L7           23 DUP REM L6 (1 DUPLICATE REMOVED)

=> d ti l5 1-164

L5   ANSWER 1 OF 164  USPATFULL on STN
TI     Identification of novel e2f target genes and use thereof

L5   ANSWER 2 OF 164  USPATFULL on STN
TI     Cleaning composition

L5   ANSWER 3 OF 164  USPATFULL on STN
TI     Gene expression profiling of colon cancer with DNA arrays

L5   ANSWER 4 OF 164  USPATFULL on STN
TI     Carbohydrate purification using ultrafiltration, reverse osmosis and
       nanofiltration

L5   ANSWER 5 OF 164  USPATFULL on STN
```

=> d ti l7 1-23

L7 ANSWER 1 OF 23 USPATFULL on STN
TI Methods and apparatus for gel-free qualitative and quantitative proteome analysis, and uses therefore

L7 ANSWER 2 OF 23 USPATFULL on STN
TI Acyl-nucleotide probes and methods of their synthesis and use in proteomic analysis

L7 ANSWER 3 OF 23 USPATFULL on STN DUPLICATE 1
TI Methods and apparatuses for gel-free qualitative and quantitative proteome analysis, and uses therefore

L7 ANSWER 4 OF 23 USPATFULL on STN
TI Matrices for drug delivery and methods for making and using the same

L7 ANSWER 5 OF 23 USPATFULL on STN
TI Translational profiling

L7 ANSWER 6 OF 23 USPATFULL on STN
TI Fusion proteins comprising DP-178 and other viral fusion inhibitor peptides useful for treating aids

L7 ANSWER 7 OF 23 USPATFULL on STN
TI Nucleic acids encoding DP-178 and other viral fusion inhibitor peptides useful for treating aids

L7 ANSWER 8 OF 23 USPATFULL on STN
TI Compositions and methods for modeling bacillus subtilis metabolism

L7 ANSWER 9 OF 23 USPATFULL on STN
TI Yeast proteome analysis

L7 ANSWER 10 OF 23 USPATFULL on STN
TI Libraries of expressible gene sequences

L7 ANSWER 11 OF 23 USPATFULL on STN
TI Matrices for drug delivery and methods for making and using the same

L7 ANSWER 12 OF 23 USPATFULL on STN
TI Libraries of expressible gene sequences

L7 ANSWER 13 OF 23 USPATFULL on STN
TI Models and methods for determining systemic properties of regulated reaction networks

L7 ANSWER 14 OF 23 USPATFULL on STN
TI Nucleotide sequence of the mycoplasma genitalium genome, fragments thereof, and uses thereof

L7 ANSWER 15 OF 23 USPATFULL on STN
TI Regulation and manipulation of sucrose content in sugarcane

L7 ANSWER 16 OF 23 USPATFULL on STN
TI Methods for identifying drug targets based on genomic sequence data

L7 ANSWER 17 OF 23 USPATFULL on STN
TI Polynucleotides and polypeptides derived from corn ear

L7 ANSWER 18 OF 23 USPATFULL on STN
TI Matrices for drug delivery and methods for making and using the same

L7 ANSWER 19 OF 23 USPAT2 on STN

TI Genome DNA of bacterial symbiont of aphids

L7 ANSWER 20 OF 23 USPATFULL on STN
TI Genomic DNA sequences of ashbya gossypii and uses thereof

L7 ANSWER 21 OF 23 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI In vitro enzymatic synthesis of deoxyribonucleosides comprises reacting deoxyribose 1-phosphate and a nucleobase to form a deoxyribonucleoside and an inorganic phosphate.

L7 ANSWER 22 OF 23 CABA COPYRIGHT 2006 CABI on STN
TI Alternate routes for starch synthesis in developing grains of wheat and sorghum: indirect evidence through its regulation by inorganic phosphates and organic acids.

L7 ANSWER 23 OF 23 CABA COPYRIGHT 2006 CABI on STN
TI Transgenic potato plants with strongly decreased expression of pyrophosphate:fructose-6-phosphate phosphotransferase show no visible phenotype and only minor changes in metabolic fluxes in their tubers.

=> d ibib abs 4 8 12 17 24 30-31 56-57 62 65 66 71-72 96 111 125 128 129 135 15

L5 ANSWER 4 OF 164 USPATFULL on STN
ACCESSION NUMBER: 2005:309655 USPATFULL
TITLE: Carbohydrate purification using ultrafiltration, reverse osmosis and nanofiltration
INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
PATENT ASSIGNEE(S): Neose Technologies, Horsham, PA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005269265	A1	20051208
APPLICATION INFO.:	US 2005-198839	A1	20050804 (11)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-104609, filed on 22 Mar 2002, GRANTED, Pat. No. US 6936173 Continuation of Ser. No. US 1997-947775, filed on 9 Oct 1997, GRANTED, Pat. No. US 6454946

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-28226P	19961010 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP (SF), 2 PALO ALTO SQUARE, PALO ALTO, CA, 94306, US
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1-30
LINE COUNT: 1545
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods for purifying carbohydrates, including oligosaccharides, nucleotide sugars, and related compounds, by use of ultrafiltration, nanofiltration and/or reverse osmosis. The carbohydrates are purified away from undesired contaminants such as compounds present in reaction mixtures following enzymatic synthesis or degradation of oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 164 USPATFULL on STN
ACCESSION NUMBER: 2005:254953 USPATFULL
TITLE: Mannosyl transfer with regeneration of GDP-mannose
INVENTOR(S): Wong, Chi-Huey, Rancho Santa Fe, CA, UNITED STATES
PATENT ASSIGNEE(S): The Scripps Research Institute (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005221447	A1	20051006
APPLICATION INFO.:	US 2005-145810	A1	20050606 (11)

RELATED APPLN. INFO.: Division of Ser. No. US 2002-262503, filed on 1 Oct 2002, GRANTED, Pat. No. US 6919440 Division of Ser. No. US 1993-122229, filed on 15 Sep 1993, GRANTED, Pat. No. US 6485930
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WELSH & KATZ, LTD, 120 S RIVERSIDE PLAZA, 22ND FLOOR, CHICAGO, IL, 60606, US
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1-12
LINE COUNT: 1068
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A one-pot glycosylation reaction is disclosed in which a mannosyl (Man) group is enzymatically transferred to an acceptor molecule. The starting glycoside is a mannosyl 1-phosphate that is enzymatically converted to its GDP derivative via UTP and a pyrophorylase. The formed GDP derivative is used in the enzyme-catalyzed glycosyl transfer. That enzyme-catalyzed glycosyl transfer to an acceptor releases GDP that is enzymatically converted to GTP for further conversion of mannosyl 1-phosphate into its GDP derivative. Also disclosed are a recombinant α1,2-mannosyltransferase that is enzymatically active, is dispersible in an aqueous reaction medium, and free of the transmembrane portion of the native enzyme, as well as DNA encoding that transferase, an expression vector containing exogenous DNA that encodes that enzyme and E. coli cells containing that vector.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 164 USPATFULL on STN
ACCESSION NUMBER: 2005:220892 USPATFULL
TITLE: Enzymes
INVENTOR(S): Yang, Junming, San Jose, CA, UNITED STATES
Dyung Lu, Aina M., San Jose, CA, UNITED STATES
Yue, Henry, Sunnyvale, CA, UNITED STATES
Elliott, Vicki S., San Jose, CA, UNITED STATES
Warren, Bridget A., Encinitas, CA, UNITED STATES
Duggan, Brendan M., Sunnyvale, CA, UNITED STATES
Forsythe, Ian J., Redwood City, CA, UNITED STATES
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Yao, Monique G., Carmel, IN, UNITED STATES
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Griffin, Jennifer A., Fremont, CA, UNITED STATES
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Lal, Preeti G., Santa Clara, CA, UNITED STATES
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Zebarjadian, Yeganeh, San Francisco, CA, UNITED STATES

Swarnakar, Anita, San Francisco, CA, UNITED STATES
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Jin, Pei, Palo Alto, CA, UNITED STATES
Richardson, Thomas W., Redwood City, CA, UNITED STATES
Bhatia, Umesh, San Jose, CA, UNITED STATES
Burrill, John D., Redwood City, CA, UNITED STATES
Lee, Sally, San Francisco, CA, UNITED STATES
Blake, Julie J., San Francisco, CA, UNITED STATES
Ho, Anne, Sunnyvale, CA, UNITED STATES
Zheng, Wenjin, Mountain View, CA, UNITED STATES
Gao, Jin, Sunnyvale, CA, UNITED STATES
PATENT ASSIGNEE(S): Incyte Corporation, Palo Alto, CA, UNITED STATES, 94304 (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005191627	A1	20050901	
APPLICATION INFO.:	US 2003-491183	A1	20020926	(10)
	WO 2002-US31096		20020926	
			20040329	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-326388P	20010928 (60)
	US 2003-328979P	20011012 (60)
	US 2003-346034P	20011019 (60)
	US 2003-348284P	20011026 (60)
	US 2003-338048P	20011108 (60)
	US 2003-332340P	20011116 (60)
	US 2003-368799P	20020329 (60)
	US 2003-368722P	20020329 (60)
	US 2003-381588P	20020517 (60)
	US 2003-387119P	20020607 (60)
	US 2003-390662P	20020621 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: INCYTE CORPORATION, EXPERIMENTAL STATION, ROUTE 141 & HENRY CLAY ROAD, BLDG. E336, WILMINGTON, DE, 19880, US
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
LINE COUNT: 19139
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Various embodiments of the invention provide human enzymes (ENZM) and polynucleotides which identify and encode ENZM. Embodiments of the invention also provide expression vectors, host cells, antibodies, agonists, and antagonists. Other embodiments provide methods for diagnosing, treating, or preventing disorders associated with aberrant expression of ENZM.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 17 OF 164 USPATFULL on STN
ACCESSION NUMBER: 2005:158186 USPATFULL
TITLE: Cell-based assay for identifying peptidase inhibitors
INVENTOR(S): Fang, Hong, Chapmansboro, TN, UNITED STATES
Green, Neil, Chapmansboro, TN, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005136394	A1	20050623	
APPLICATION INFO.:	US 2004-842846	A1	20040511	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-480625P	20030623 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI L.L.P., SUITE 2400, 600 CONGRESS AVENUE, AUSTIN, TX, 78701-3271, US
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 2115
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides assays for the identification of inhibitors of endopeptidase toxins. The assays utilize genetically engineered yeast cells that contain a conditionally expressed endopeptidase toxin. When conditions for expression of the toxin are met, the toxin cleaves a yeast (natural or engineered) peptide product that is required for yeast survival. If the yeast is grown in the presence of an candidate substance that is an inhibitor of the toxin, the yeast survives, thereby providing a rapid and sensitive identification of the inhibitor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 24 OF 164 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 2005-296144 [30] WPIDS
DOC. NO. CPI: C2005-091609
TITLE: Inhibiting misincorporation of a terminator in a single base primer extension reaction, useful in analyzing nucleic acid variations, by enzymatically removing inorganic pyrophosphate prior to or during a single base extension reaction.
DERWENT CLASS: B04 D16
INVENTOR(S): BUZBY, P
PATENT ASSIGNEE(S): (PEKE) PERKINELMER LAS INC
COUNTRY COUNT: 108
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2005033328	A2	20050414	(200530)*	EN	59

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2005033328	A2	WO 2004-US32164	20040930

PRIORITY APPLN. INFO: US 2003-481443P 20030930
AN 2005-296144 [30] WPIDS
AB WO2005033328 A UPAB: 20050512
NOVELTY - Inhibiting misincorporation of a terminator in a single base primer extension reaction comprises providing a product of a nucleic acid synthesis reaction, the product comprising a nucleic acid template and a quantity of inorganic pyrophosphate, and incubating the product and an inorganic pyrophosphatase to decrease the quantity of pyrophosphate.
DETAILED DESCRIPTION - The method of inhibiting misincorporation of a terminator in a single base primer extension reaction cited above further comprises providing a product of a nucleic acid synthesis reaction, the product comprising a nucleic acid template and a quantity of inorganic

pyrophosphate, incubating the product and an inorganic pyrophosphatase to decrease the quantity of pyrophosphate, to yield a purified reaction product, combining the purified reaction product, a primer, a terminator having a detectable label, and a polymerase to form a mixture, and incubating the mixture to extend the primer by addition of the terminator in a single base primer extension reaction, where decreasing the quantity of inorganic pyrophosphate in the product of a nucleic acid synthesis reaction inhibits pyrophosphorolysis in the single base primer extension reaction, so as to inhibit misincorporation of a terminator.

INDEPENDENT CLAIMS are also included for the following:

(1) a composition, comprising an inorganic pyrophosphatase, a residual component removal agent selected from an alkaline phosphatase, an exonuclease, and their combination, and a carrier;

(2) a composition for use in reducing misincorporation of a terminator in a single base extension reaction, comprising an acyclo nucleoside terminator, an inorganic pyrophosphate as mentioned, a pyrophosphatase and a carrier;

(3) a commercial package comprising a mixture of an exonuclease, an alkaline phosphatase, an inorganic pyrophosphatase as mentioned, and a carrier, and instructions for use of the mixture in a primer extension reaction; and

(4) a process for determining the identity of a nucleotide at an interrogation site.

USE - The inorganic pyrophosphatase is useful in a process for identification of an interrogation site by single base extension (claimed). The methods and compositions of the present invention are also useful for detecting and characterizing a specified nucleotide in a nucleic acid sequence, in particular for reducing misincorporation of a labeled nucleotide or nucleotide analog in a primer extension reaction and for analyzing nucleic acid variations, such as single nucleotide polymorphisms.

Dwg.0/3

L5 ANSWER 30 OF 164 USPATFULL on STN

ACCESSION NUMBER: 2004:327408 USPATFULL

TITLE: Glycorandomization and production of novel vancomycin analogs

INVENTOR(S): Thorson, Jon, Middleton, WI, UNITED STATES

PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004259228	A1	20041223
APPLICATION INFO.:	US 2003-670073	A1	20030924 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-109672, filed on 1 Apr 2002, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-279682P	20010330 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GODFREY & KAHN, S.C., 780 N. WATER STREET, MILWAUKEE, WI, 53202

NUMBER OF CLAIMS: 43

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 17 Drawing Page(s)

LINE COUNT: 3698

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides combinatorial methods for rapidly generating a diverse library of glycorandomized structures, comprising incubating one or more aglycons and a pool of NDP-sugars in the presence of a glycosyltransferase. The glycosyltransferase may be one that is associated with or involved in production of natural secondary metabolites, or one which is putatively associated with or involved in

production of natural secondary metabolites. The glycosyltransferase may show significant flexibility with respect to its NDP-sugar donors and/or its aglycons. NDP-sugar donors may be commercially available, or may be produced by utilizing mutant or wild type nucleotidyltransferases significant flexibility with respect to their substrates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 31 OF 164 USPATFULL on STN
ACCESSION NUMBER: 2004:315541 USPATFULL
TITLE: Method of making teprenone
INVENTOR(S): Saucy, Gabriel G., Essex Fells, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004249219	A1	20041209
APPLICATION INFO.:	US 2001-899418	A1	20010703 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-215897P	20000705 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SHERIDAN ROSS PC, 1560 BROADWAY, SUITE 1200, DENVER, CO, 80202
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 1388
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is directed to an efficient and economical method of making teprenone. Teprenone is synthesized by converting geranylgeraniol to teprenone by a novel route. The method of synthesis can begin with geranylgeraniol obtained from a biological source such as fermentation of a microorganism capable of producing geranylgeranyl or enzymatic synthesis in a cell free system to produce predominantly the 5E isomer of teprenone. The chemical synthesis proceeds with retention of configuration such that the teprenone produced has the isomeric configuration of the geranylgeraniol starting material.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 56 OF 164 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 2004-698721 [68] WPIDS
CROSS REFERENCE: 2004-698712 [68]
DOC. NO. CPI: C2004-247100
TITLE: Preparing plasmid, comprises preparing cleared host cell lysate, and enzymatically converting open circular plasmid obtained from lysate or from unintentional conversion of supercoiled plasmid from lysate, to supercoiled plasmid.
DERWENT CLASS: B04 D16
INVENTOR(S): HYMAN, E D
PATENT ASSIGNEE(S): (HYMA-I) HYMAN E D
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2004191871	A1	20040930	(200468)*		17

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

US 2004191871 A1 US 2003-396880 20030325

PRIORITY APPLN. INFO: US 2003-396880 20030325
AN 2004-698721 [68] WPIDS
CR 2004-698712 [68]
AB US2004191871 A UPAB: 20041026
NOVELTY - Preparing (M1) plasmid from host cells which contain the plasmid, comprises preparing a cleared lysate of the host cells, and in vitro enzymatically converting open circular plasmid to supercoiled plasmid.

DETAILED DESCRIPTION - Preparing (M1) plasmid from host cells which contain the plasmid, comprises preparing a cleared lysate of the host cells, and in vitro enzymatically converting open circular plasmid to supercoiled plasmid, where the open circular plasmid is obtained from the cleared lysate or obtained from supercoiled plasmid from the cleared lysate which is beforehand unintentionally converted to open circular plasmid.

INDEPENDENT CLAIMS are also included for the following:

(1) an enzyme composition (C1) useful for converting unligatable open circular plasmid to supercoiled plasmid comprising:

(i) DNA gyrase, DNA ligase, polynucleotide kinase, and 3'-phosphatase;

(ii) DNA polymerase I, DNA ligase, DNA gyrase, and not comprising a primase enzyme;

(iii) 3'-deblocking enzyme, DNA polymerase I, DNA ligase and DNA gyrase; or

(iv) DNA polymerase I, DNA ligase, DNA gyrase, and one or more exonucleases, where the exonucleases selectively degrade linear chromosomal DNA without degrading open circular plasmid, relaxed covalently closed circular plasmid, and supercoiled plasmid; and

(2) preparing highly supercoiled plasmid from host cells which contain host supercoiled plasmid, comprising preparing a cleared lysate of the host cells, where the cleared lysate comprises the host supercoiled plasmid, enzymatically in vitro converting open circular plasmid to supercoiled plasmid, where the open circular plasmid is obtained from the cleared lysate or obtained from supercoiled plasmid from the cleared lysate which is beforehand unintentionally converted to open circular plasmid, and incubating in vitro the host supercoiled plasmid with DNA gyrase in the presence of DNA gyrase nucleotide cofactor, where the host supercoiled plasmid is further supercoiled.

USE - (M1) is useful for preparing plasmid from host cells which contain the plasmid (claimed).

ADVANTAGE - (M1) provides increased supercoiled plasmid yield. The theoretical maximum yield of supercoiled plasmid is 100% of starting plasmid. (M1) avoids nicking damage in the initial plasmid processing, as any nicked plasmid will be converted to supercoiled plasmid. (M1) prepares large plasmids, which tend to have a higher percentage of open circular plasmid due to their larger size. The gyrase incubation increases the extent of supercoiling. The increased supercoiled state could create a more condensed plasmid molecule with potentially greater transformability. The DNA gyrase incubation converts all plasmid to a more highly supercoiled state.

DESCRIPTION OF DRAWING(S) - The figure shows a method of preparing plasmid from host cell which contains the plasmid.
Dwg.1/1

L5 ANSWER 57 OF 164 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 2004-280268 [26] WPIDS
DOC. NO. NON-CPI: N2004-221971
DOC. NO. CPI: C2004-108059
TITLE: Stabilization reagent composition for stabilizing blood sample containing platelets, has reactants that generate multiple species of formaldehyde-ammonium complexes, inhibitors of phosphatase and protease enzymatic

activities.

DERWENT CLASS: A89 A96 B04 B05 D16 S03

INVENTOR(S): MAPLES, J A; CHARIE, L A; FLAGLER, D J; MILLS, R A; TIMMONS, R

PATENT ASSIGNEE(S): (MAPL-I) MAPLES J A; (BECI) BECKMAN COULTER INC; (COUS) COULTER INT CORP

COUNTRY COUNT: 29

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2004038424	A1	20040226	(200426)*		31
WO 2004017895	A2	20040304	(200426)	EN	
RW: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR					
W: JP					
US 6913932	B2	20050705	(200544)		
EP 1552269	A2	20050713	(200546)	EN	
R: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR					
JP 2005536550	W	20051202	(200582)		41

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2004038424	A1	US 2002-226825	20020823
WO 2004017895	A2	WO 2003-US24426	20030806
US 6913932	B2	US 2002-226825	20020823
EP 1552269	A2	EP 2003-793016	20030806
		WO 2003-US24426	20030806
JP 2005536550	W	WO 2003-US24426	20030806
		JP 2004-530872	20030806

FILING DETAILS:

PATENT NO	KIND		PATENT NO
EP 1552269	A2	Based on	WO 2004017895
JP 2005536550	W	Based on	WO 2004017895

PRIORITY APPLN. INFO: US 2002-226825 20020823

AN 2004-280268 [26] WPIDS

AB US2004038424 A UPAB: 20040421

NOVELTY - A stabilization reagent composition (I) comprising reactants that generate multiple species of formaldehyde-ammonium complexes, at least one inhibitor of phosphatase enzymatic activity, and at least one inhibitor of protease enzymatic activity, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a stabilized blood sample (II) containing platelets treated with (I);

(2) a kit comprising:

(a) as a first separate component, an aliphatic aldehyde of 1-4 carbon atoms in liquid or powder form or reactants that upon hydrolysis generate formaldehyde;

(b) as a second separate component, a solution comprising an ammonium salt solution, where the component has a physiological pH that does not adversely effect the stabilizing function of the composition;

(c) at least one inhibitor of phosphatase enzymatic activity;

(d) at least one inhibitor of protease enzymatic activity; and

(e) instructions for mixing the above components prior to contacting the mixture with a blood sample containing platelets immediately upon withdrawal from the body; and

(3) assessing the efficacy of a blood cell stabilizing reagent

comprising measuring platelet activation by contacting a blood sample which has been treated with a cell-stabilizing reagent composition with an activating material that activates cellular response by causing physical and/or enzymatic changes in platelets, storing the sample at 20-25 deg. C for 72 hours, and determining the change in expression of CD62p on platelets in the sample compared with the expression of CD62p on platelets in a sample that has not been treated with the reagent composition, where the percentage of platelets expressing the CD62p antigen in the reagent treated samples is less than that percentage in an untreated sample stored for the same duration.

USE - (I) is useful for stabilizing blood cells in a blood sample containing platelets which involves contacting the sample with (I), where cells in the sample are characterized by a stabilized expression of CD62p on platelets in the sample for at least 24 hours after the treatment, where the treated sample maintains plus or minus 20% of the number of CD62p positive platelets that would be found in the blood sample, when the sample is measured without treatment immediately after withdrawal from the body. The method further comprises the step of drawing a blood sample into a calcium chelating anticoagulant or a coagulation pathway inhibitor prior to the contacting step. The method further comprises measuring platelet activation potential by contacting the sample with an activating material that is known to activate cellular response by causing physical and/or enzymatic changes in platelets and an associated increase in CD62p expression, storing the sample at 20-25 deg. C for 72 hours, and determining the change in expression of CD62p on platelets in the sample compared with the expression of CD62p on platelets in a sample untreated with the reagent composition, where the percentage of platelets expressing the CD62p antigen in the reagent treated samples is less than that percentage in an untreated sample stored for the same duration. The activating material is a solution of phorbol 12-myristate 13-acetate (PMA) that is added to a final concentration of 0.001-5 micro M in the sample. The change in percentage of CD62p platelets indicative of stabilization is measured by flow cytometry according to the formula: (Parameter C minus Parameter A) is greater than (Parameter D minus Parameter B), where, Parameter A is the percentage of CD62p positive platelets in an anticoagulated blood sample containing no stabilization reagent composition, Parameter B is the percentage of CD62p positive platelets in an anticoagulated blood sample incubated with the stabilization reagent composition for one hour, Parameter C is the percentage of CD62p positive platelets in an anticoagulated blood sample containing no stabilization reagent composition to which the PMA is added to a concentration 0.001-5 micro M and incubated for up to one hour, and Parameter D is the percentage of CD62p positive platelets in the anticoagulated blood sample containing the stabilization reagent to which the PMA is added to a concentration 0.001-5 micro M and incubated for up to one hour. The percentage of CD62p positive platelets in the blood containing stabilization reagent does not change more than 20% within the first hour after addition of the PMA (all claimed).

ADVANTAGE - The composition prevents or reduces cellular activation and response to environmental change without changing the antigenic makeup of the cells. The treated sample has the same state of platelet activation that is found in an untreated blood sample that is measured immediately upon withdrawal from the body. The presence of stabilizer prevents post-withdrawal activation of the platelets in the sample by in vitro environmental conditions. The presence of the stabilizer in the blood samples stabilizes the platelet activation state so that the percentage of CD62p platelets in the stabilized blood sample increases by no more than 20% over the percentage of CD62p platelets in the blood sample measured immediately upon withdrawal. The composition and methods stabilize in a donor's withdrawn blood sample for at least 24 hours the percentage of CD62p platelets. This stabilization of the blood sample thereby enables accurate diagnosis of disease based on percentage of CD62p platelets in blood samples that are stored prior to evaluation. Thus, in the case of a healthy donor, the methods and compositions permit evaluation of the blood sample by providing a state of platelet activation that is not unduly high

due to in vitro environmental conditions. In the case of an unhealthy donor, the methods and compositions permit evaluation of the blood sample by providing a state of platelet activation that is not unduly low due to in vitro environmental conditions.
Dwg.0/13

L5 ANSWER 62 OF 164 USPATFULL on STN DUPLICATE 5
ACCESSION NUMBER: 2003:213620 USPATFULL
TITLE: In situ screening to optimize variables in organic reactions
INVENTOR(S): Berkowitz, David B., Lincoln, NE, UNITED STATES
Bose, Mohua, La Jolla, CA, UNITED STATES
Choi, Sungjo, Chonan-City, KOREA, REPUBLIC OF
PATENT ASSIGNEE(S): University of Nebraska, Lincoln, NE, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003148257	A1	20030807	
	US 6974665	B2	20051213	
APPLICATION INFO.:	US 2002-235950	A1	20020906	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-386438P	20020607 (60)
	US 2002-371159P	20020410 (60)
	US 2001-317810P	20010906 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BANNER & WITCOFF, 1001 G STREET N W, SUITE 1100, WASHINGTON, DC, 20001
NUMBER OF CLAIMS: 55
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 3066
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A biphasic process for rapid screening of organic reactions comprising monitoring relative rates of parallel organic reactions. The screening process is suitable to determine the efficacy of different reactants, process conditions, and process enhancers such as catalysts or promoters. The biphasic process also allows multiple samples to be analyzed/monitored simultaneously. In addition because enzymes are used to monitor the reaction product in this invention, when that product is chiral and an enantio-discriminating enzyme is used to monitor the product, in addition to the relative rates, enantioselectivities of a set of parallel organic reactions can also be determined. The monitoring is done in situ and thus removal of aliquots for separate testing is unnecessary

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 65 OF 164 USPATFULL on STN DUPLICATE 8
ACCESSION NUMBER: 2003:71370 USPATFULL
TITLE: Amplification process
INVENTOR(S): Clark, Duncan Roy, Farnborough, UNITED KINGDOM
Vincent, Suzanne Patricia, Farnborough, UNITED KINGDOM

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003049655	A1	20030313	
	US 6951744	B2	20051004	
APPLICATION INFO.:	US 2002-135807	A1	20020430	(10)

	NUMBER	DATE

PRIORITY INFORMATION: GB 2001-10501 20010430
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: JOHN S. PRATT, ESQ, KILPATRICK STOCKTON, LLP, 1100 PEACHTREE STREET, SUITE 2800, ATLANTA, GA, 30309
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 1571
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for conducting a nucleic acid amplification reaction, said method comprising forming an amplification reaction mixture in the presence of sufficient of a pyrophosphate salt to prevent primer extension taking place, digesting said pyrophosphate salt with a pyrophosphatase enzyme (PPase), and subjecting said reaction mixture to conditions such that an amplification reaction may proceed.

This can be used as a "hot start" amplification.

Particular novel pyrophosphatase enzymes for use in the method are also described and claimed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 66 OF 164 USPATFULL on STN DUPLICATE 9
ACCESSION NUMBER: 2003:64673 USPATFULL
TITLE: 5'-thio phosphate directed ligation of oligonucleotides and use in detection of single nucleotide polymorphisms
INVENTOR(S): Bandaru, Rajanikanth, Corelville, IA, UNITED STATES
Kumar, Gyanendra, Guilford, CT, UNITED STATES
PATENT ASSIGNEE(S): Bandaru and Kumar (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003044794	A1	20030306	
	US 6635425	B2	20031021	
APPLICATION INFO.:	US 2001-910372	A1	20010720	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-259918P	20010105 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Alan J. Grant, Esq., c/o Carella, Byrne, Bain, Gilfillan,, Cecchi, Stewart & Olstein, 6 Becker Farm Road, Roseland, NJ, 07068
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 21 Drawing Page(s)
LINE COUNT: 1835
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a novel method for ligation of oligonucleotides containing 5'-phosphorothioates on complementary templates by the action of DNA ligases. This reaction is readily applied to the synthesis of a single stranded circular DNA containing a phosphorothioate linkage at the site of ligation junction. The efficiency of 5'-phosphorothioate directed ligation reaction by ATP dependent DNA ligase reaction is similar to conventional 5'-phosphate ligation. The utility of enzymatic ligation in probing specific sequences of DNA is also described. The present invention also provides a novel non-enzymatic ligation of 5'-phosphorothioates that has been applied to the synthesis of single strand phosphorothioate and phosphate circular DNA. A process for detecting the presence of a mismatch in an otherwise complementary pair of oligonucleotides is disclosed using an enzyme-based technique which shows the presence of a mismatch by failing

to form a ligated single stranded DNA circle that can optionally be amplified using standard methods of rolling circle amplification.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 71 OF 164 USPATFULL on STN

ACCESSION NUMBER:	2003:207209 USPATFULL
TITLE:	Methods for enzymatic conversion of GDP-mannose to GDP-fucose
INVENTOR(S):	Sjoberg, Eric R., San Diego, CA, UNITED STATES
PATENT ASSIGNEE(S):	Cytel Corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003143567	A1	20030731
APPLICATION INFO.:	US 2002-206655	A1	20020725 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-231905, filed on 14 Jan 1999, GRANTED, Pat. No. US 6500661		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-71076P	19980115 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS:	55
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	11 Drawing Page(s)
LINE COUNT:	2449

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods for practical enzymatic conversion of GDP-mannose to GDP-fucose. These methods are useful for efficient synthesis of reactants used in the synthesis of fucosylated oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 72 OF 164 USPATFULL on STN

ACCESSION NUMBER:	2003:194592 USPATFULL
TITLE:	Nucleic acids useful for enzymatic conversion of GDP-mannose to GDP-fucose
INVENTOR(S):	Sjoberg, Eric R., San Diego, CA, UNITED STATES
PATENT ASSIGNEE(S):	Cytel Corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003134403	A1	20030717
APPLICATION INFO.:	US 2002-206485	A1	20020725 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-231905, filed on 14 Jan 1999, GRANTED, Pat. No. US 6500661		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-71076P	19980115 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS:	55
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	11 Drawing Page(s)
LINE COUNT:	2445

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods for practical enzymatic conversion of

GDP-mannose to GDP-fucose. These methods are useful for efficient synthesis of reactants used in the synthesis of fucosylated oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 96 OF 164 USPATFULL on STN

ACCESSION NUMBER:	2002:287597 USPATFULL
TITLE:	Practical in vitro sialylation of recombinant glycoproteins
INVENTOR(S):	Paulson, James C., Del Mar, CA, UNITED STATES Bayer, Robert J., San Diego, CA, UNITED STATES Sjoberg, Eric, San Diego, CA, UNITED STATES
PATENT ASSIGNEE(S):	Neose Technologies, Inc., Horsham, PA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002160460	A1	20021031
APPLICATION INFO.:	US 2002-81456	A1	20020221 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-7741, filed on 15 Jan 1998, GRANTED, Pat. No. US 6399336

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-35710P	19970116 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS:	58
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	2 Drawing Page(s)
LINE COUNT:	1142

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods for practical in vitro sialylation of glycoproteins, including recombinantly produced glycoproteins. The methods are useful for large-scale modification of sialylation patterns.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 111 OF 164 USPATFULL on STN

ACCESSION NUMBER:	2002:217057 USPATFULL
TITLE:	Enzymatic synthesis of gangliosides
INVENTOR(S):	DeFrees, Shawn, San Marcos, CA, United States
PATENT ASSIGNEE(S):	Neose Technologies, Inc., Horsham, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6440703	B1	20020827
APPLICATION INFO.:	US 2001-935363		20010822 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-203200, filed on 30 Nov 1998, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-67693P	19971201 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Prats, Francisco
LEGAL REPRESENTATIVE:	Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS:	18
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 4 Drawing Page(s)

LINE COUNT: 1312
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides methods for practical in vitro synthesis of gangliosides and other glycolipids. The synthetic methods typically involve enzymatic synthesis, or a combination of enzymatic and chemical synthesis. One or more of the enzymatic steps is preferably carried out in the presence of an organic solvent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 125 OF 164 USPATFULL on STN
ACCESSION NUMBER: 2001:63652 USPATFULL
TITLE: Method for enhancing the activity of an enzyme
INVENTOR(S): Hage, Ronald, Vlaardingen, Netherlands
Hora, Jiri, Den Haag, Netherlands
Swarthoff, Ton, Vlaardingen, Netherlands
Twisker, Robin Stefan, Vlaardingen, Netherlands
PATENT ASSIGNEE(S): Lever Brothers Company, division of Conopco, Inc., New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6225275	B1	20010501	
APPLICATION INFO.:	US 1998-93635		19980604	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1997-201748	19970610

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Del Cotto, Gregory R.
LEGAL REPRESENTATIVE: Mitelman, Rimma
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 622
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A first aspect of the invention is a process for enhancing the activity of an oxidorecudtase by adding to the enzyme, certain specific compounds which are capable of enhancing the activity of said oxidoreductase enzyme. A second aspect of the invention is an enzymatic bleach composition comprising an oxidoreductase and enhancing compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 128 OF 164 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 2001-578992 [65] WPIDS
DOC. NO. CPI: C2001-171892
TITLE: Assay for inorganic phosphate, involves treating sample with specific enzyme and correlating obtained detectable product with inorganic phosphate present in the reaction mixture.
DERWENT CLASS: B04 D16 E13
INVENTOR(S): HAUGLAND, R P; ZHOU, M
PATENT ASSIGNEE(S): (MOLE-N) MOLECULAR PROBES INC
COUNTRY COUNT: 2
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6265179	B1	20010724	(200165)*		18
GB 2360846	A	20011003	(200166)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

US 6265179	B1	US 2000-495882	20000201
GB 2360846	A	GB 2001-2200	20010129

PRIORITY APPLN. INFO: US 2000-495882 20000201
AN 2001-578992 [65] WPIDS
AB US 6265179 B UPAB: 20011108
NOVELTY - Reaction mixture is produced by treating sample with phosphorylase enzyme (PE), PE substrate (PES), oxidase enzyme (OE), peroxidase enzyme (POE) and POE substrate (POES) of preset formula.

DETAILED DESCRIPTION - The method involves producing a reaction mixture by treating a sample, simultaneously or sequentially with a phosphorylase enzyme, phosphorylase enzyme substrate, oxidase enzyme, peroxidase enzyme and peroxidase enzyme substrate. When inorganic phosphate is present in the reaction mixture, phosphorylase enzyme converts inorganic phosphate and phosphorylase enzyme substrate into phosphorylase product(s), at least one of which is an oxidase substrate for oxidase enzyme, oxidase enzyme converts oxidase substrate into oxidase product(s) at least one of which is hydrogen peroxide, and peroxidase enzyme converts peroxidase enzyme substrate into a detectable product in presence of hydrogen peroxide. The presence or amount of detectable product in the reaction mixture is detected and correlated with presence or amount of inorganic phosphate in the reaction mixture. The peroxidase enzyme substrate is represented by formula (I).

R2-R5 = H, F, Cl, Br, I, CN, 1-6C alkyl or 1-6C alkoxy each optionally substituted by F, Cl, Br, I, carboxylic acid, its salt or its ester of 1-6C alcohol, sulfonic acid or its salt;

R1, R6 = H, or R1 in combination with R2 or R5 in combination with R6 or both form a fused aromatic six membered ring optionally substituted by one or more times of F, Cl, Br, I, CN, 1-18C alkyl or 1-18C alkoxy each optionally substituted by F, Cl, Br, I, carboxylic acid, its salt or its ester of 1-6C alcohol, sulfonic acid or its salt;

A, B' = OH or NR8R9;

R8, R9 = H, 1-6C alkyl, 1-6C carboxyalkyl or its salt, 1-6C sulfoalkyl or its salt, each optionally substituted by amino, hydroxy, carboxylic acid, its salt or its ester of 1-6C alcohol, or R8 in combination with R9 forms piperidine, morpholine, pyrrolidine or piperazine, each optionally substituted by methyl, carboxylic acid, its salt or its ester of 1-6C alkyl, sulfonic acid or its salt, or R8 in combination with R2, or R9 in combination with R3, or both form a 5- or 6-membered ring optionally substituted by one or more times F, Cl, Br, I, CN, 1-6C alkyl or 1-6C alkoxy each optionally substituted by F, Cl, Br, I, carboxylic acid, its salt or its ester of 1-6C alcohol, sulfonic acid or its salt;

X = N-(C=Y)-R10, N-(SO2)-R11 or CHR12;

Y = O or S;

R10 = H, 1-6C (perfluoro)alkyl, 1-6C alkoxy, 1-6C alkenyl, aryl, amino, 1-6C alkylamino or 1-6C dialkylamino;

R11 = H, 1-6C (perfluoro)alkyl, 1-6C alkenyl, aryl, amino, 1-6C alkylamino or 1-6C dialkylamino;

R12 = H, F, CN, carboxylic acid, its salt or its ester of 1-6C alcohol, or 1-6C alkyl optionally substituted one or more times by F, Cl, Br, carboxylic acid, its salt or its ester of 1-6C alcohol, sulfonic acid or its salt, amino, 1-6C alkylamino or 1-6C dialkylamino or compound (Ia);

R13-R17 = H, F, Cl, Br, I, sulfonic acid, its salt, carboxylic acid or its salt.

INDEPENDENT CLAIMS are also included for the following:

(i) Assay of maltose: The method involves producing a reaction mixture by treating a sample simultaneously or sequentially with inorganic phosphate, maltose phosphorylase enzyme, glucose oxidase enzyme, peroxidase enzyme, and peroxidase enzyme substrate. When maltose is present in reaction mixture, maltose phosphorylase converts inorganic phosphate and maltose into glucose and glucose-1-phosphate, glucose oxidase converts glucose into oxidase products, at least one of which is

H2O2, and peroxidase enzyme converts peroxidase enzyme substrate into a detectable product in presence of H2O2. The presence or amount of detectable product is detected and correlated with maltose in the reaction mixture;

(ii) Assay for phosphate-producing enzyme: The method involves producing reaction mixture by treating sample with appropriate substrate for phosphate-producing enzyme, phosphorylase enzyme, phosphorylase enzyme substrate, oxidase enzyme and peroxidase enzyme substrate. The phosphate-producing enzyme converts phosphate-producing enzyme substrate into product(s), at least one of which is inorganic phosphate, phosphorylase enzyme converts inorganic phosphate and phosphorylase enzyme substrate into phosphorylase product(s), at least one of which is oxidase substrate and oxidase enzyme converts oxidase substrate into oxidase product(s), at least one of which is hydrogen peroxide, and peroxidase enzyme converts peroxidase enzyme substrate into detectable compound. The presence or amount of detectable product is correlated with presence or amount of phosphate producing enzyme;

(iii) Composition comprising phosphorylase enzyme, phosphorylase enzyme substrate, oxidase enzyme, peroxidase enzyme and peroxidase enzyme substrate; and

(iv) Kit comprising phosphorylase enzyme, phosphorylase enzyme substrate, oxidase enzyme, peroxidase enzyme and peroxidase enzyme substrate.

USE - For detecting and quantifying inorganic phosphate in samples.

ADVANTAGE - The method is highly sensitive and may be utilized at wavelengths that are more compatible with biological samples. The method is performed at physiological pH and continuous assay is permitted. The method is valuable tool for measuring variety of phosphate dependent enzymes in biological samples.

Dwg.0/2

L5 ANSWER 129 OF 164 IFIPAT COPYRIGHT 2006 IFI on STN

AN	03540034 IFIPAT;IFIUDB;IFICDB			
TITLE:	METHOD OF SEQUENCING DNA BASED ON THE DETECTION OF THE RELEASE OF **PYROPHOSPHATE** AND **ENZYMATIC** NUCLEOTIDE DEGRADATION; USING POLYMERASE CHAIN REACTION TO EXTEND A PRIMER AND RELEASE **INORGANIC PYROPHOSPHATE**, THEN DETECTING RELEASE OF **INORGANIC PHOSPHATE** TO IDENTIFY BASE COMPLEMENTARY TO TARGET POSITION; **REMOVING** UNINCORPORATED NUCLEOTIDES USING **ENZYME**			
INVENTOR(S):	Nyren; Pal, Skarpnack, SE			
PATENT ASSIGNEE(S):	Pyrosequencing AB, Uppsala, SE			
PRIMARY EXAMINER:	Horlick, Kenneth R			
AGENT:	Baker Botts			

	NUMBER	PK	DATE	
PATENT INFORMATION:	US 6258568	B1	20010710	
	(CITED IN 001 LATER PATENTS)			
	WO 9828440		19980702	
APPLICATION INFORMATION:	US 1999-331517		19990723	
	WO 1997-GB3518		19971222	
			19990723	PCT 371 date
			19990723	PCT 102(e) date
EXPIRATION DATE:	22 Dec 2017			

	NUMBER	DATE
PRIORITY APPLN. INFO.:	GB 1996-26815	19961223
FAMILY INFORMATION:	US 6258568	20010710
DOCUMENT TYPE:	Utility	
	REASSIGNED	
FILE SEGMENT:	CHEMICAL	

GRANTED

MICROFILM REEL NO: 010241 FRAME NO: 0503
NUMBER OF CLAIMS: 17
GRAPHICS INFORMATION: 6 Drawing Sheet(s), 6 Figure(s).
AB The present invention relates to a method of sequencing DNA, based on the detection of base incorporation by the release of pyrophosphate (PPi) and simultaneous enzymatic nucleotide degradation.
CLMN 17
GI 6 Drawing Sheet(s), 6 Figure(s).

L5 ANSWER 135 OF 164 USPATFULL on STN
ACCESSION NUMBER: 1999:78582 USPATFULL
TITLE: Enzymatic synthesis of glycosidic linkages
INVENTOR(S): Defrees, Shawn, San Marcos, CA, United States
Bayer, Robert J., San Diego, CA, United States
Ratcliffe, Murray, Carlsbad, CA, United States
PATENT ASSIGNEE(S): Cytel Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5922577		19990713
APPLICATION INFO.:	US 1996-628545		19960410 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-419669, filed on 11 Apr 1995, now patented, Pat. No. US 5728554 And Ser. No. US 1995-419659, filed on 11 Apr 1995
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Prats, Francisco
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1809
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides improved methods for the formation of glycosidic linkages. These methods are useful for the preparation of compounds of formula:

NeuAcα(2→3)Galβ(1→4)(Fucα
1→3)GlcN(R')β(1→3)Galβ--OR

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d kwic 4 8 12 17 24 30-31 56-57 62 65 66 71-72 96 111 125 128 129 135 l5

L5 ANSWER 4 OF 164 USPATFULL on STN
DETD . . . being added almost daily to maintain the metal ion concentration. Manganese ion is a required cofactor for at least one **enzyme** in the sialyl transferase cycle. However, the manganese ion **inorganic phosphate** produced form a **complex** of very low solubility. Because of this limited solubility, the transferase cycle can continue to proceed, but at reduced reaction rates. By supplementing the manganese ions which are lost by **precipitation** with **pyrophosphate**, the rate of reaction can be maintained. Thus, when manganese ion concentration is maintained in an optimal range, the sialyl. . .

L5 ANSWER 8 OF 164 USPATFULL on STN
DETD Thus, the multi-**enzyme** system started with mannose 1-**phosphate** (Man-1-P) which was synthesized from mannose in three steps in this laboratory [Sim et al., J. Am. Chem. Soc., in press). Mannose 1-**phosphate** reacted with GTP catalyzed by GDP-mannose